Improving Sanitation Service Delivery in Kampala, Uganda

Reform of the Urban Water and Sanitation Sector Programme

Uganda

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WASH Situation in Kampala 2011

Connection to Sewer

6/100

On-site Sanitation

85/100

Open Defecation

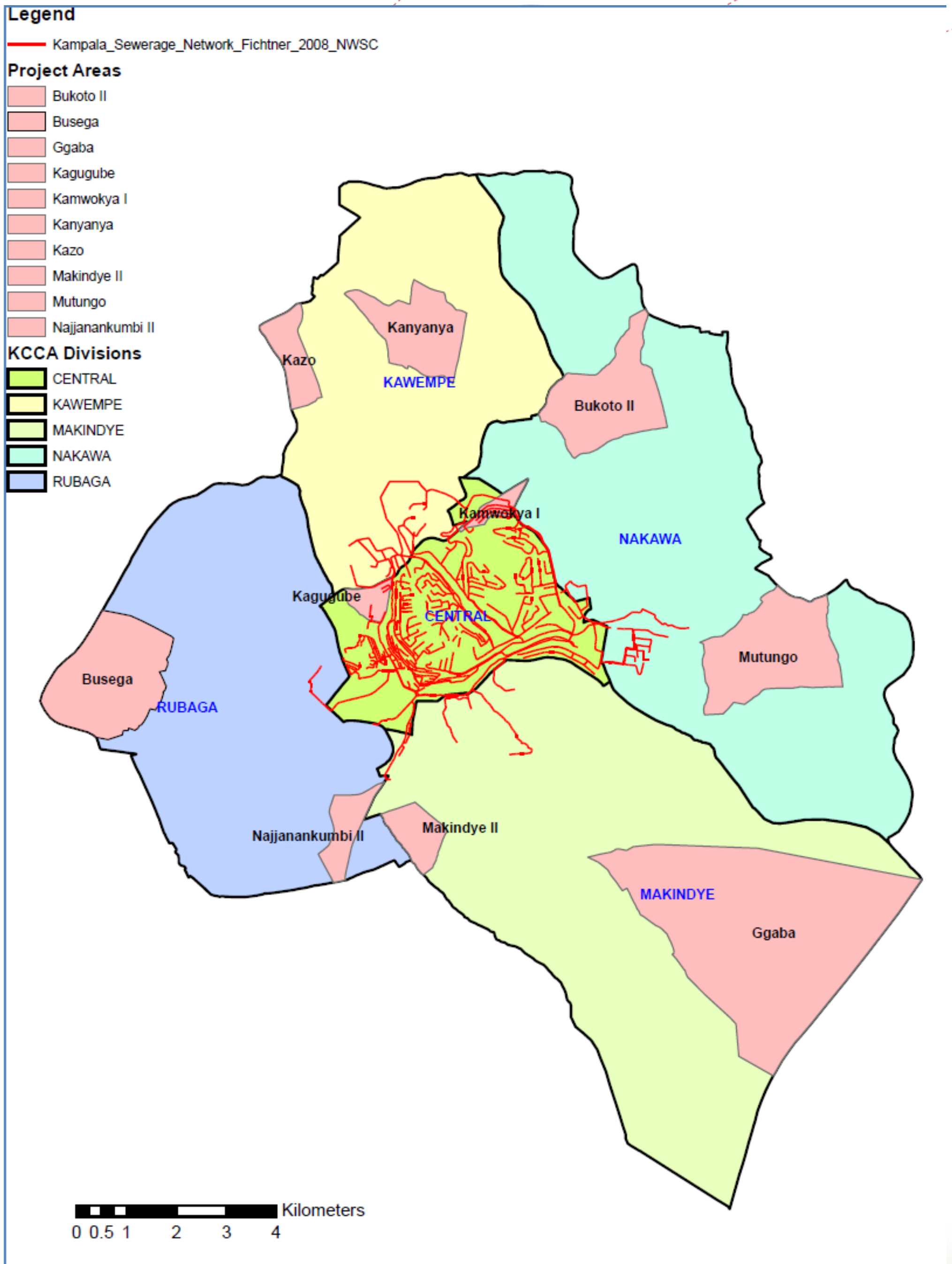
9/100

People that share a toilet with an average of 6 households (~27 people) in Informal settlements

78/100

Source: Environmental Sanitation in Uganda, 2009; Report No. 44485-UG

World Bank; Research for policy 2: When is shared sanitation improved sanitation?

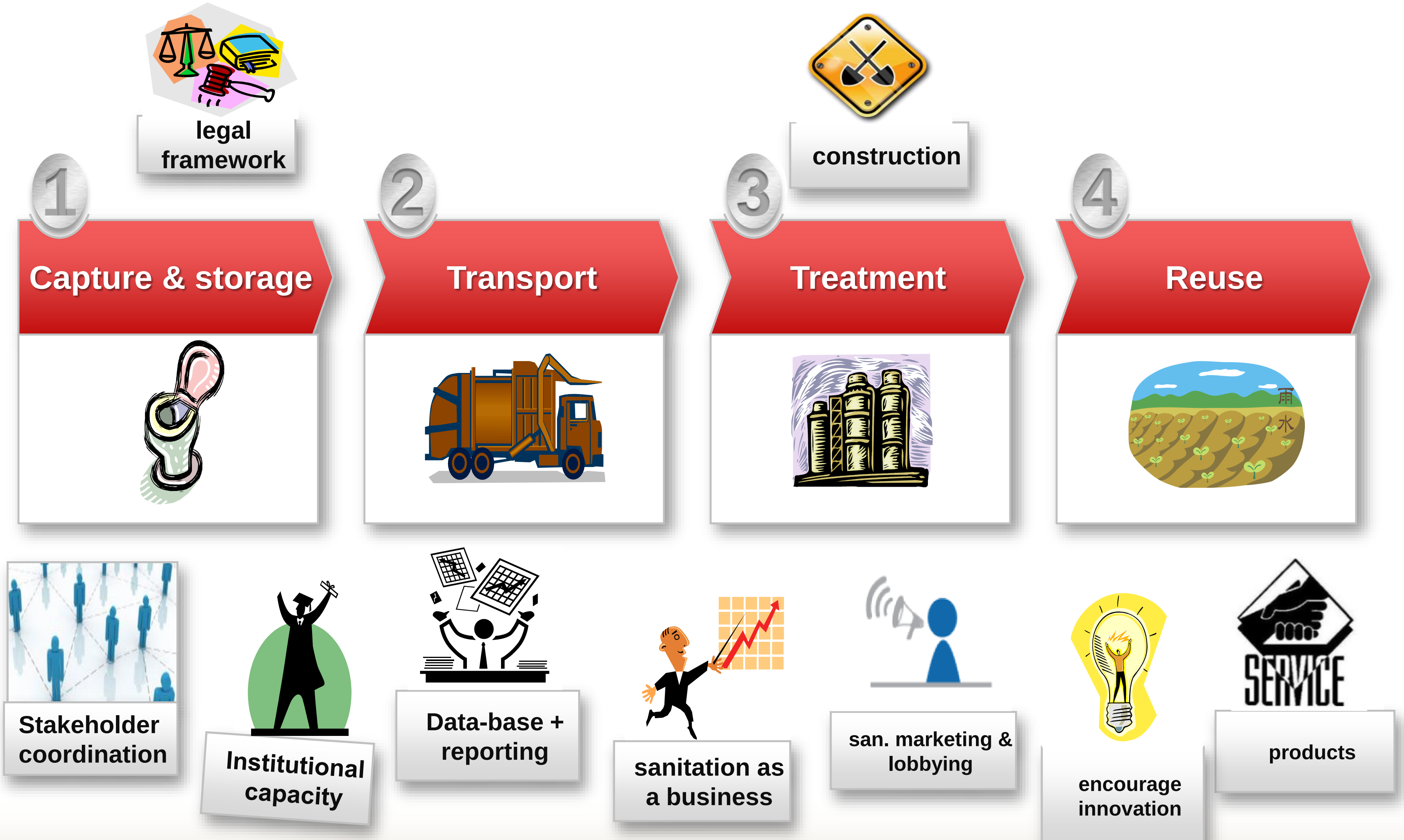


- 1 FS treatment plant
- Design capacity of 400 m³/day FS and 5,000 m³/day wastewater treatment
- FS treatment processes at the plant include sedimentation (settling tanks), co-treatment with wastewater (stabilization ponds) and solar drying (sludge drying beds).

Sanitation Market Assessment 2014

- 43% FS collection efficiency
- Current FS collection capacity by private cesspool trucks is insufficient
- Households are currently paying USD 48 per trip (equivalent to 1% of the mean monthly household expenditure of USD 384 based on an emptying frequency of once in 2 years.)
- Based on the mean household expenditure, the FS emptying service is deemed affordable to more than 90% of the households.
- Overall willingness to pay for emptying services (USD 50 per trip)
- 84% of the respondents preferred a one-off payment for emptying services.

Improvements along the sanitation chain



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Strategy Development 2012

guiding principles

- have a higher impact
- secure better coordination
- optimize the resource base
- achieve better performance

areas


legal framework


key Processes


Stakeholder coordination


Data-base + reporting

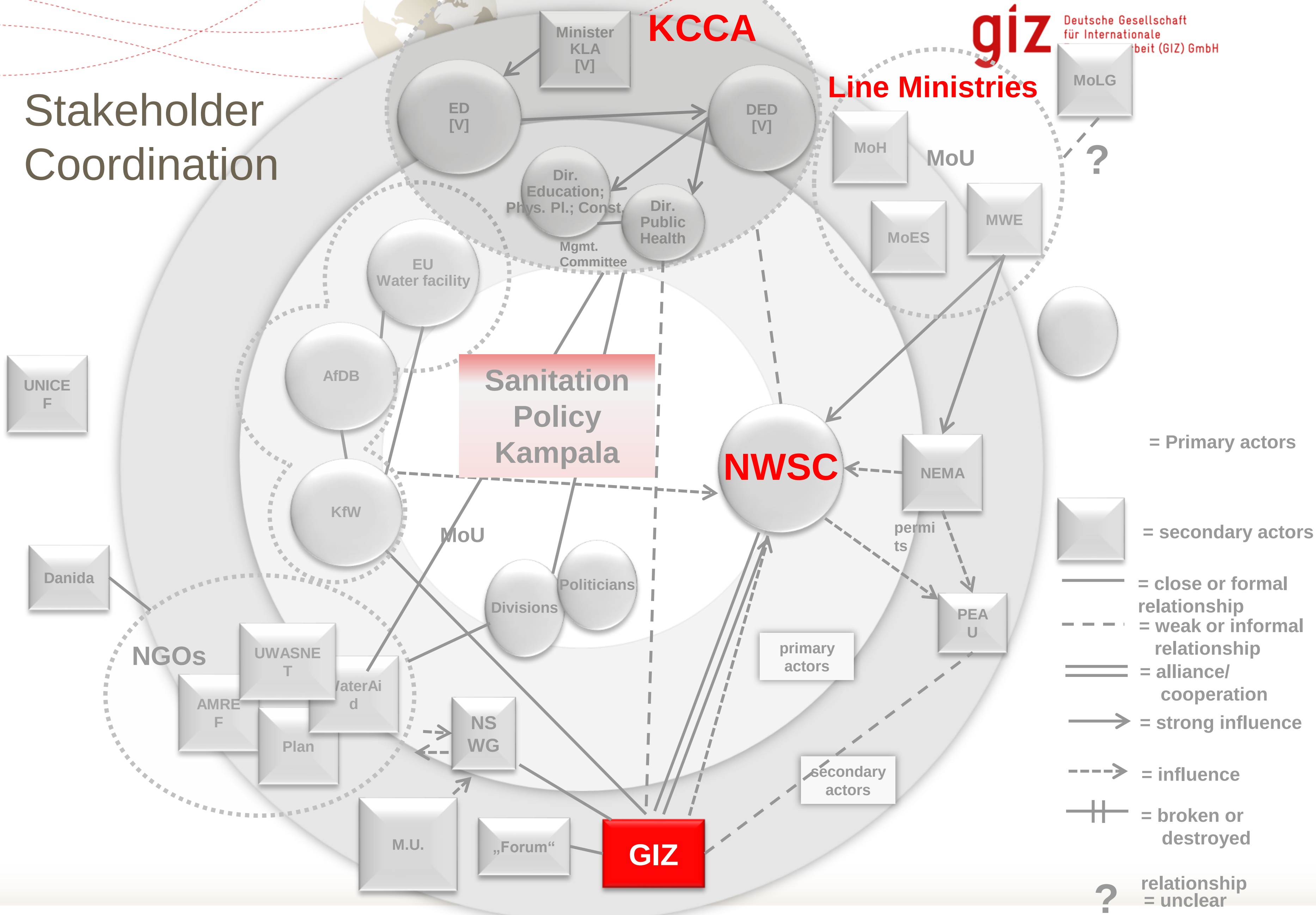

Sanitation as a business


Institutional Capacity

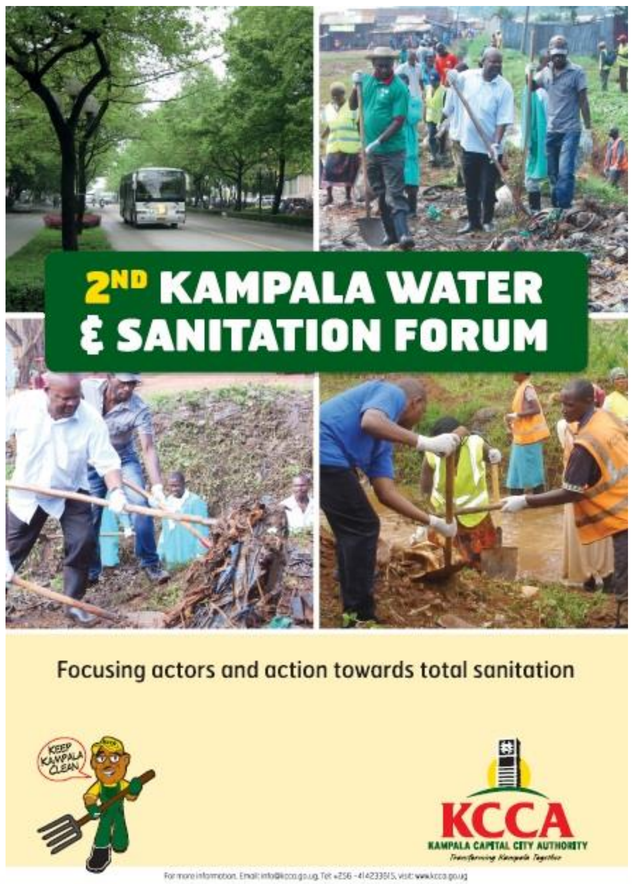
strategic objectives

- intra- and interorganisational optimization
- data- and strategy based coordination efforts
- improved & holistic sanitation management
- continious organisational reforms & efforts

Stakeholder Coordination

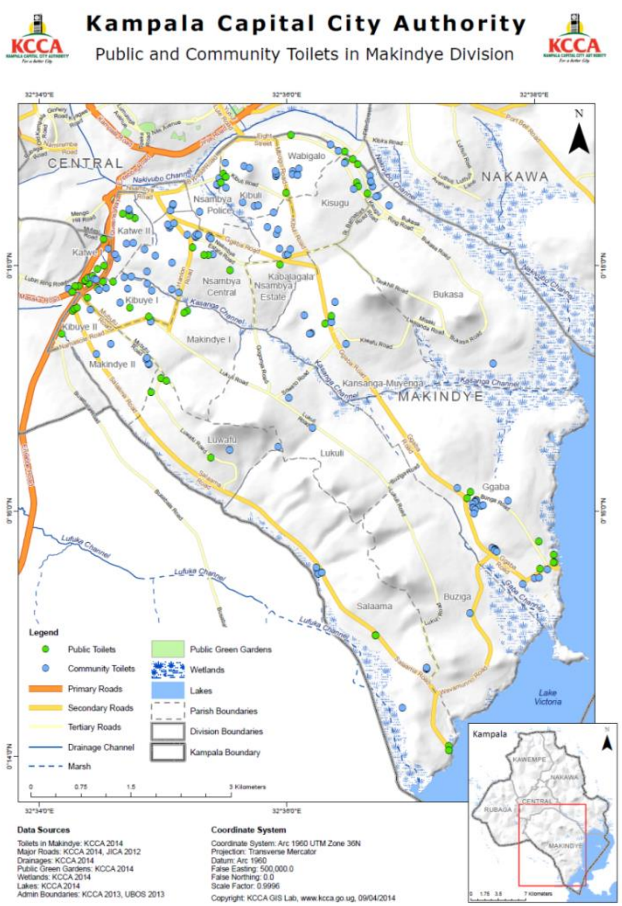


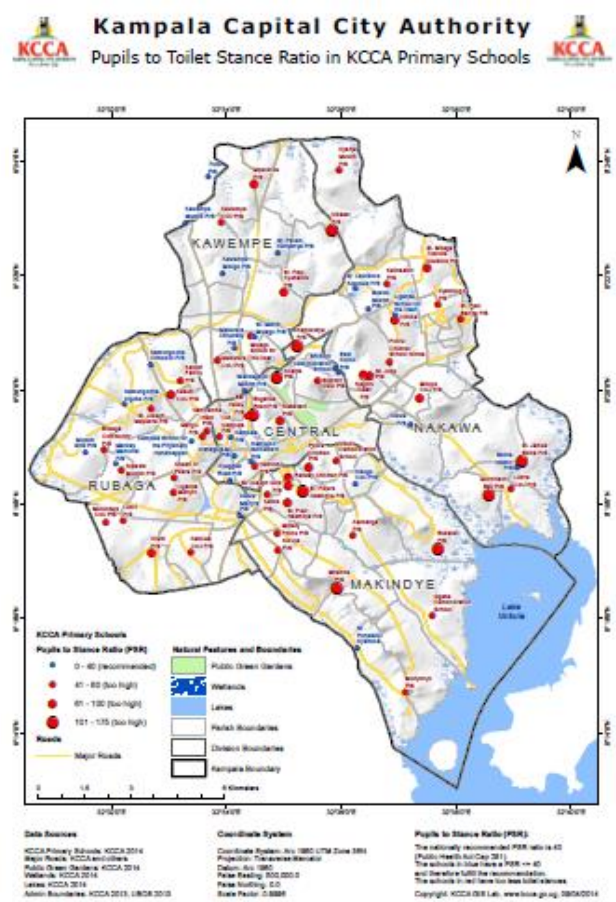
Stakeholder Coordination.2



Stakeholder coordination

Data management and planning





Data-base + reporting

Legal Framework and Mandates

- Already enables licensing, regulation of emptying services, enforcement of standards, engagement of the private sector through SLAs and formulation of specific bye-laws at lower urban councils to supplement the existing laws.

New statutory instruments/byelaws should include:

- Standards for sanitation facilities that can be emptied by vacuum tankers (pit latrines, septic tanks).
- Enable KCCA to formally engage and regulate (setting performance standards, tariffs, etc.) the FS C&T operators
- Specific penalties for breaching the byelaw.

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Proposed Institutional/Operational Framework

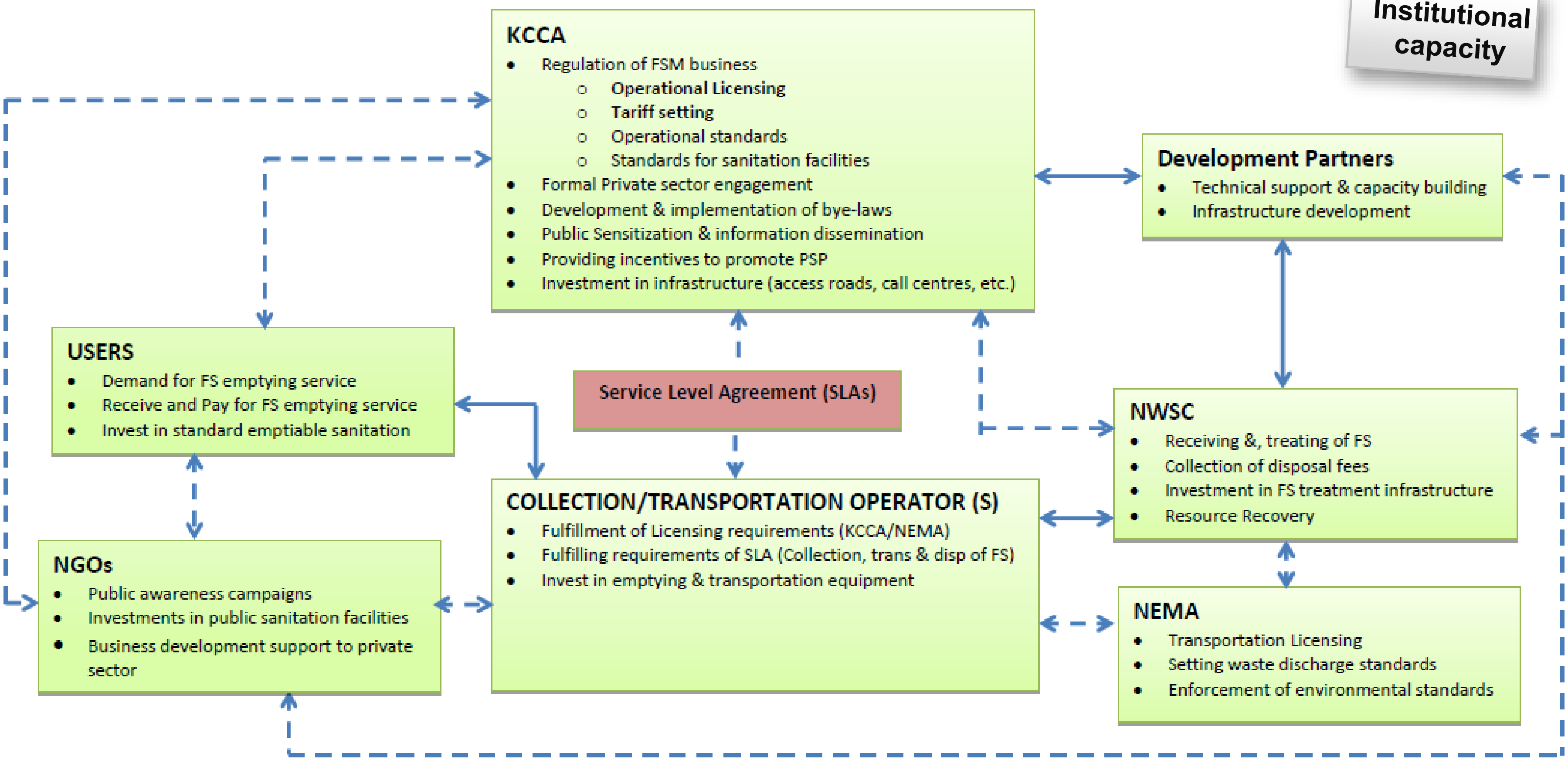

Figure 5-1 Proposed Institutional and Operational Framework for FSM in Kampala

Creating a business environment

sanitation as a business

- Define operational territories (based on the 5 Divisions of Kampala)
- Award service level contracts to providers for the respective zones through a competitive bidding process
- One of the bidding parameters will be the unit emptying charge
- Collection of user fees by the service providers
- The FS C&T operators will be required to remit a fixed (monthly or annual) operational fee to KCCA

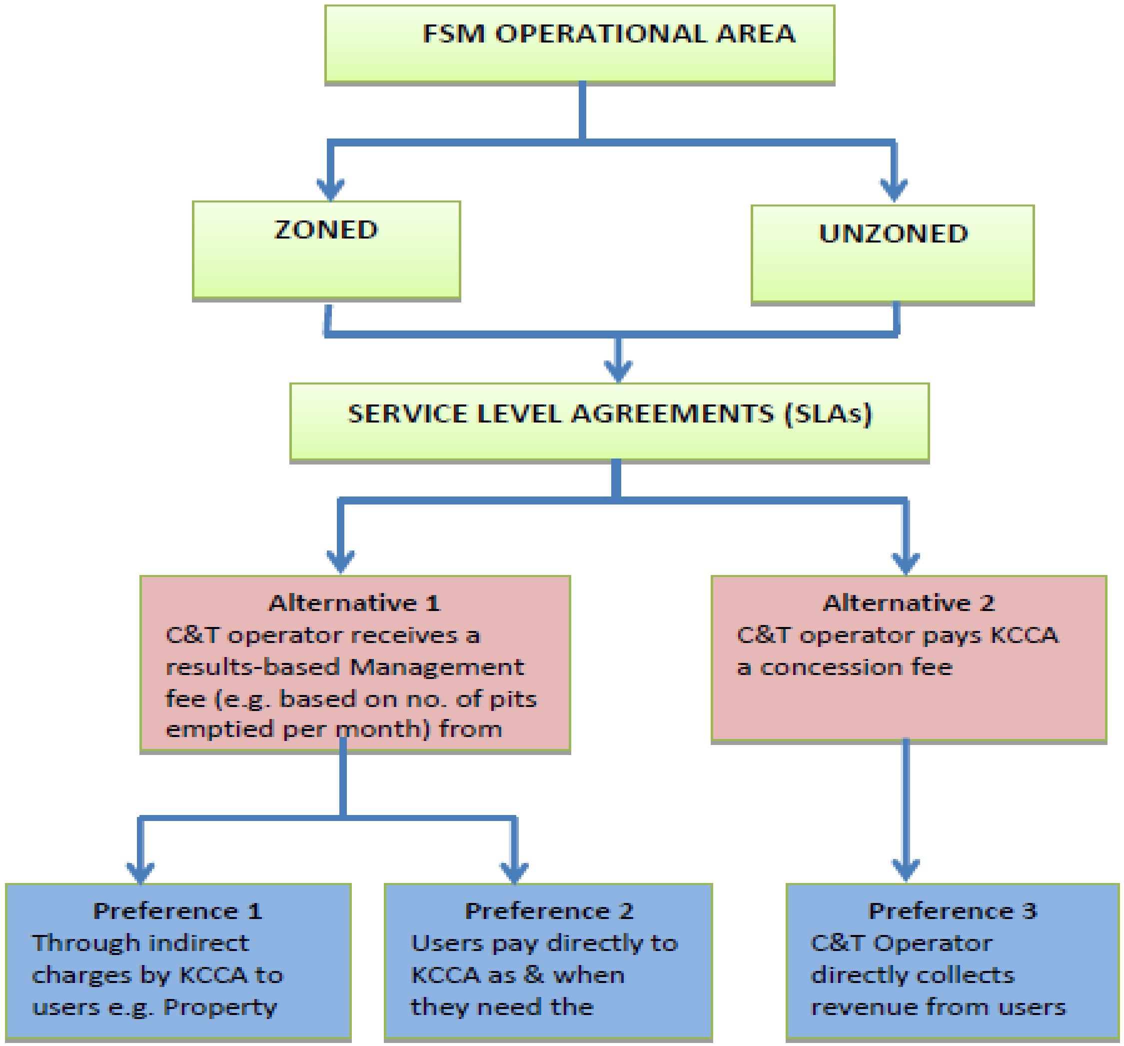

Figure 6-1 Business/Financial Model Options for FS C&T in Kampala

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Financial Analysis

sanitation as a business

- Average charge of USD 8.4 to USD 9.1 per m^3 of FS collected/transported
- Recommended tariff regimes for the respective zones should cover O&M costs, depreciation, taxes and a reasonable markup (15%)
- The average market size per zone is estimated between USD 250,000 and 632,000 p.a., whereas the average combined market size for Kampala is estimated at USD 2.4 Million p.a.
- The total number of cesspool trucks (considering an average capacity of $5m^3$) required to effectively collect FS from Kampala is 74, whereas 8 to 19 trucks can suffice in a zone depending on the market size
- Greater potential for business growth will partly depend on adopting the use of lined sanitation facilities in Kampala

Framework conditions for viable services

To achieve a viable business and financial model, there will be need for:

- GIS based database for Kampala for planning resource allocation and monitoring of service provision;
- SLAs for FS Collection and Transportation (FS C&T) to ensure regulated, efficient and affordable services;
- Credit financing for capital-intensive equipment
- Increase FS treatment capacity and reduce FS transportation costs; this requires institutional collaboration between NWSC and KCCA

Social/Sanitation marketing

san. marketing & lobbying

- Subsidy programme for construction of standard sanitation facilities for the urban poor
- Implement a voucher based payment systems for subsidizing FS emptying in targeted urban poor communities
- Upgrade the existing call centre to bridge the gap between users and service providers and improve efficiency (e.g. reduction in the response time for receiving services).

Improvements along the sanitation chain